

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition
of Texaco, Incorporated, for
Review of Order No. 75-24,
(NPDES Permit No. CA0002020) of
the California Regional Water
Quality Control Board, Los
Angeles Region. Our File No. A-86.

Order No. WQ 77-19

BY THE BOARD:

On December 16, 1974, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), adopted Order No. 74-540 (NPDES Permit No. CA0002020) establishing waste discharge requirements for Texaco, Inc., chemical processing and sulfur recovery plant in Carson, California. On January 17, 1975, the State Water Resources Control Board (State Board) received a petition for review of Order No. 74-540 filed by Texaco.

On March 10, 1975, the Regional Board adopted Order No. 75-24 (NPDES Permit No. CA0002020) which established waste discharge requirements for the above-described facility and rescinded Order No. 74-540. On April 18, 1975, the State Board received a petition for review of Order No. 75-24 filed by Texaco. On June 19, 1975, the State Board adopted Resolution No. 75-63 resolving to review Order No. 75-24 on its own motion. On January 22, 1976, the State Board adopted Order No. WQ 76-1 dismissing the petition for review of Order No. 74-540 and granting Texaco leave to amend its petition for review of Order No. 75-24.

On March 16, 1977, the State Board received final arguments and comments from Texaco regarding this petition.

BACKGROUND

Texaco operates a commercial chemical processing and sulfur recovery plant at 23208 South Alameda Street, Carson, California, and discharges up to 670,000 gallons per day (gpd) of combined wastewater flow from cooling tower blowdown, boiler blowdown, rainfall, deck washdown, and minor miscellaneous sources including zeolite softener wastewater, single-pass pump cooling water, etc. Maximum dry-weather flow is 127,000 gpd. The combined wastewater flow is diverted through a combination skim basin and settling basin before being discharged to Dominguez Channel, a water of the United States, approximately 1/3 mile north of Sepulveda Boulevard, within the tidal prism (Discharge 001). As required to meet waste discharge requirements, the wastes are at times pumped to the Texaco, Inc. petroleum refinery for further treatment and discharged to Dominguez Channel together with the refinery discharge at a point about 300 feet northerly of Pacific Coast Highway (Discharge 002), which is covered in NPDES permit CA0003778.

CONTENTIONS AND FINDINGS

1. Contention: Effluent limitations in Order No. 75-24 should be expressed solely in terms of mass emission rates (e.g., pounds per day) and not in terms of concentration rates (e.g., mg/l).

Findings: Our regulations provide that "Effluent limitations shall specify the average and maximum allowable mass emission of pollutants in terms of pounds per day, or if not appropriate, in another technically correct and precise manner".^{1/} This provision should not be construed to limit the Regional Board's authority in prescribing effluent limitations in terms of concentrations. The Regional Board, in its discretion, has the authority to prescribe limitations in terms of concentrations in addition to mass emission rates. Of the 670,000 gpd total wastewater discharged by Texaco, a maximum of 127,000 gpd is discharged during dry weather and the rest is storm water runoff. Mass emission rates alone are an ineffective control mechanism for wastewater sources with highly variable flow rates such as this since they provide little inducement for good treatment during periods of low flow.

Consequently, we find that it was appropriate in this case for the Regional Board to establish both mass emission rates in order to protect receiving waters and concentration limits to eliminate the possibility that pollutants could be discharged in high concentrations.

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1. Section 2235.5(b)(4), Article 5, Subchapter 9, Chapter 3, Title 23, California Administrative Code.

Petitioner argues that the imposition of concentration limits will discourage water conservation at the facilities involved. Our finding that imposition of concentration limitations by the Regional Board was appropriate and proper does not preclude the petitioner from requesting a modification in the concentration limits at such time as petitioner has developed a specific plan for water conservation. The Board enthusiastically supports water conservation efforts by water users and in order not to delay implementation of water conservation measures by Texaco, the Regional Board is directed to consider any request filed by Texaco for a modification in concentration limitations pursuant to this paragraph in the minimum possible time consistent with applicable notice requirements. However, complete elimination of otherwise sound concentration limitations based on a contention that petitioner may at some time in the future decide to implement a water conservation program is inappropriate.

2. Contention: The chromium limits are too stringent.

Findings: Order No. 75-24 limits the discharge of total chromium in excess of 0.01 mg/l daily maximum and 0.005 mg/l. monthly average from discharge 001. These concentration limits are similar to those prescribed for ocean discharges in the Water Quality Control Plan for Ocean Waters of California (Ocean Plan).

This discharge to the Dominguez Channel is not covered by the Ocean Plan, but to impose less restrictive limits would encourage discharge to the Channel which is more vulnerable to adverse effects than the ocean due to its lower dilution capacity and lower flushing capability. In addition to the substantial increased costs to Texaco which would be necessary to meet the chromium limits, they contend that the use of non-chromate chemical treatment in their cooling tower systems would seriously increase corrosion rates in their mild steel tubing and that this could have adverse effects on the environment. We are aware of the difficulties involved in complying with Ocean Plan limits for chromium and it is possible that this limit will be changed as a result of the Ocean Plan review before the Table B limits become effective. However, the effective date of the subject chromium limit is July 1, 1977 and not July 1, 1978, the effective date of Table B of the

Ocean Plan. Consequently, we find that Texaco should also be given the July 1, 1978 effective date and should be given the same opportunity as has been afforded other dischargers to request an extension of the implementation date beyond July 1, 1978, but not exceeding July 1, 1983. (See State Board Resolution 74-5.)

3. Contention: The effluent limitation on visible oil and grease is inappropriate.

Findings: Effluent limitation A7 of Order 75-24 provides that "Wastes discharges shall not contain visible oil and grease, and shall not cause the appearance of grease, oil, or oily slick, or foam in the receiving waters or on channel banks, walls, inverts or other structures". Texaco argues that because the State Board and EPA had previously agreed not to reference Standard Provision 10² in permits, the visible oil and grease standard is also inappropriate.

We disagree with the petitioner's argument. Standard Provision 10 was dropped in order to avoid the possibility of dual enforcement proceedings under §§ 311 and 402 of the

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2. "There shall be no discharge of harmful quantities of oil or hazardous substances, as specified by regulation adopted pursuant to §311 of the Federal Water Pollution Control Act, or amendments thereto."

Federal Water Pollution Control Act. However, this does not mean that a Regional Board cannot adopt oil and grease standards. The Water Quality Control Plan for the Los Angeles Basin includes water quality objectives for oil and grease. The Plan states:

"Waters shall not contain oil, grease, or materials of petroleum origin in concentrations that create or cause to be created a visible film on the surface of the water, that cause nuisance, or that otherwise adversely affect beneficial uses."

The Regional Board has prescribed both limitations on oil and grease concentrations and on visible oil and grease caused by the discharge. The former is readily measurable and provides a justifiable basis for enforcement proceedings, while the latter is adequate to protect the esthetic quality of Dominguez Channel. We find that the Regional Board's action in prescribing limitation on the visible oil and grease for this discharge to be appropriate and proper.

4. Contention: Standard Provision 11³ is inadequate in that
3. In the event the discharger is unable to comply with any of the conditions of this Order due to:
- (a) breakdown of waste treatment equipment;
 - (b) accidents caused by human error or negligence; or
 - (c) other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

it fails to provide protection for self incrimination and protection against non-compliance during malfunction, start-ups and shut-down operations and due to the acts of third parties.

Findings: This same contention was made to the State Board by Union Oil Company of California in its petition for review of Order No. 74-152 (NPDES Permit No. CA0005053). Our response to that contention is found in State Board Order No. WQ 75-16, at page 6, wherein it is stated:

"We recognize that influent quality changes, equipment malfunction, facilities start up and shutdown or other circumstances may sometimes result in the effluent exceeding permit limitations despite the exercise of reasonable care by petitioner. In these cases the petitioner may come forward to demonstrate to the Regional Board that such circumstances exist. The Regional Board will consider these factors in exercising their (sic) discretionary authority in determining noncompliance and for enforcement purposes. Regional Board enforcement actions must be reasonably based pursuant to public hearing and due process protections. Limitless facts and possibilities exist regarding upset conditions and each case must be reviewed on its own merits. To limit this discretion of the Regional Board would be to impair seriously the purpose and enforcement provisions of the Federal Water Pollution Control Act."

The Regional Board is not required to include a provision related to upsets, breakdowns, malfunctions of the treatment facility or treatment equipment in NPDES permits and did not err in adopting Order No. 75-34 without such provision or allowance. In addition, corporations are not entitled to the privilege against self-incrimination as contended by the petitioner.^{4/}

4. 17 Cal. Jur. 3d at 307, 308.

5. Contention: Advance notice to the Regional Board of plans to alter production is confusing and unnecessary.

Findings: Reporting Requirement No. 3 of Order 75-24 requires advance notice to the Regional Board of plans to alter production.^{5/} This reporting requirement is included by the Regional Board for discharges covered by EPA Guidelines in which allowable mass emission rates are calculated on the basis of production capacity. However, no such guidelines have been developed by EPA for this type of discharge and the effluent limits prescribed are not based on the production capacity. Thus, there is no need for this advance notice to the Regional Board. Report Requirement No. ^{56/} requires the filing of a report of waste discharge before

5. "The discharger shall notify the Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge and appropriate filing fee."
6. "The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge."

making any material change in the waste discharge. This will adequately inform the Regional Board when amendment of requirements are necessary. Therefore, we find that Reporting Requirement No. 3 should be deleted.

6. Contention: A provision should be included in the requirements to provide for variability of non-representative sampling and testing results.

Findings: The effluent limitations in Order 75-34 provide for averages and maximums. Averages do provide for variability of non-representative samples while maximums provide upper limits which cannot be exceeded without resulting in water quality degradation. The maximums in this permit are considerably higher than the averages which permit some variability in sampling results. It is the duty of Texaco to treat the effluent in such a manner that such variability will not result in non-compliance. Further, the discharger, as in the case of equipment malfunctions and influent quality changes, has the option of coming forward to demonstrate, if and when an enforcement action is under consideration, that a given sample was non-representative. We find this contention without merit.

7. Contention: The pH effluent limitation is too stringent.

Findings: Effluent limitation A.6 of Order 75-34 provides that the "pH of wastes shall at all times be within the range of 6.5 to 9.0". The Water Quality Control Plan for the Los Angeles Basin provides that the pH of the Dominguez Channel should be within the range of 6.5 to 8.6. Moreover, since

marine habitat is a designated beneficial use of the Dominguez Channel, the Plan provides that changes in normal ambient pH levels in the Channel as a result of discharges shall not exceed 0.2 pH units. These water quality objectives were set by the Regional Board on the receiving water, rather than the effluent. Consequently, a wider range for pH in the effluent could be allowed by the Regional Board, as long as the objectives of the Basin Plan are met. The Regional Board has prescribed the same effluent limits as those of the Ocean Plan for certain parameters present in this discharge. Therefore, the pH limits of the effluent should also be the same as the pH limits of the Ocean Plan (6-9 pH unit).

The requirements currently do not contain receiving water limitations for pH. In addition to the effluent limits for pH discussed above, receiving water limitations for this parameter should also be included in the permit. These limits should be the same as those established by the Regional Board in the Basin Plan water quality objectives. The Regional Board should establish monitoring and reporting requirements for the effluent and receiving water pH to assure compliance with the prescribed limits.

Consistency of Requirements

This Order and State Board Order No. 77-18, adopted this same date, have been prepared to respond to the particular contentions of the petitioners involved. Each Order requires modifications in specified effluent and/or receiving water limitations. As a result of the required modifications, if no action were taken to rectify the two permits the permits would differ in their requirements regarding a number of wastewater constituents, including suspended solids, ammonia nitrogen, phenols, BOD and pH. The Regional Board should take note of this fact and, to the extent consistent with the explicit requirements of the two Orders and effective water pollution control, the provisions of both permits should be made uniform.

CONCLUSIONS

After review of the record and for the reasons heretofore expressed, we reach the following conclusions:

1. Report Requirements No. 3 of Order No. 75-24 requiring advance notice to the Regional Board of plans to alter production should be rescinded.
2. The pH limitations provided in Order No. 75-24 should be revised in accordance with finding No. 7 above.
3. The effective date of the chromium limitation should be changed to July 1, 1978, in accordance with finding No. 2 above.

4. In all other respects Regional Board Order No. 75-24 is appropriate and proper as expressed in findings 1, 3, 4 and 6 above.

ORDER

IT IS HEREBY ORDERED that the California Regional Water Quality Control Board, Los Angeles Region, shall review and revise Order No. 75-24 consistent with the findings and conclusions of this Order.

Dated: August 18, 1977

/s/John E. Bryson,
John E. Bryson, Chairman

/s/W. Don Maughan,
W. Don Maughan, Vice Chairman

/s/W. W. Adams,
W. W. Adams, Member